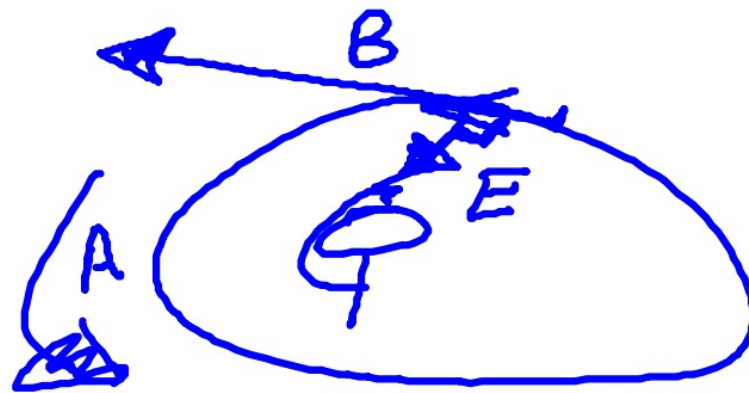


ANGULAR
velocity
Rotational
velocity



36. ω $\textcircled{A} = \omega$

37. $\textcircled{B} = v_T$

38. $\textcircled{E} = F_c$

45. $m = 100 \text{ kg}$

$$W = mg$$

$$= (100 \text{ kg})(9.8)$$

$\rightarrow d_H = 20 \text{ m}$

$\uparrow d_V = 1 \text{ m}$

$$W = 980 \text{ N} \downarrow$$

$$\text{WORK} = F_{\parallel} d$$

$$(980 \text{ N} \uparrow)(1 \text{ m})$$

$$= 980 \text{ J}$$

①

46. LIFT FORCE = A VALUE
AND IT WAS VERTICIE
the distance travelled was
HORIZONTAL. SO the WORK
WAS Zero. (A)

47. $P = 100 \text{ W}$
 $m = 300 \text{ kg}$
 $\Delta t = 8 \text{ seconds}$

WORK = $F \cdot d$
Power = $\frac{\text{WORK}}{\Delta t}$

(C) $100 \text{ W} = \frac{\text{WORK}}{8 \text{ s}} \Rightarrow 100 \text{ W} \cdot 8 \text{ s}$
 800 J

48. $\text{Power} = \frac{800 \text{ J}}{4 \text{ s}}$
 $P = 200 \text{ W}$

(C')

49. $m = 2 \text{ kg}$
 $v = 8 \text{ m/s}$
 $h = 5 \text{ m}$

(D) $PE = mgh = (2 \text{ kg})(9.8 \text{ m/s}^2)(5 \text{ m})$
 $= 98 \text{ J}$

$$50. \quad KE = \frac{1}{2} m v^2$$

$$= (5)(2 \text{ kg})(8 \text{ m/s})^2$$

$$\textcircled{C} \quad KE = 64 \text{ J}$$

51 most PE $\uparrow h = \uparrow PE$ \textcircled{A}

52 most KE $= \downarrow h = \uparrow KE$ \textcircled{B}

53 most ME All of them
 \textcircled{E}

54. $V?$ $18V$ (D)

55. P $40.5W$ (C)

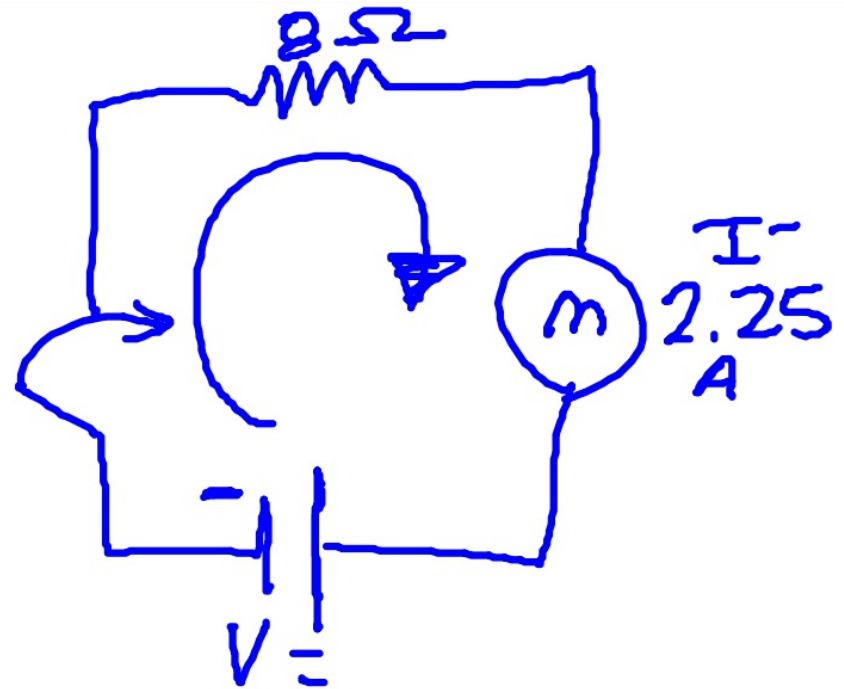
56. Direction
CW (A)

$$V = IR$$

$$(2.25A)(8\Omega)$$

$$= 18V$$

$$P = IV = (2.25A)(18V)$$
$$= 40.5W$$



60. Chemical Reaction

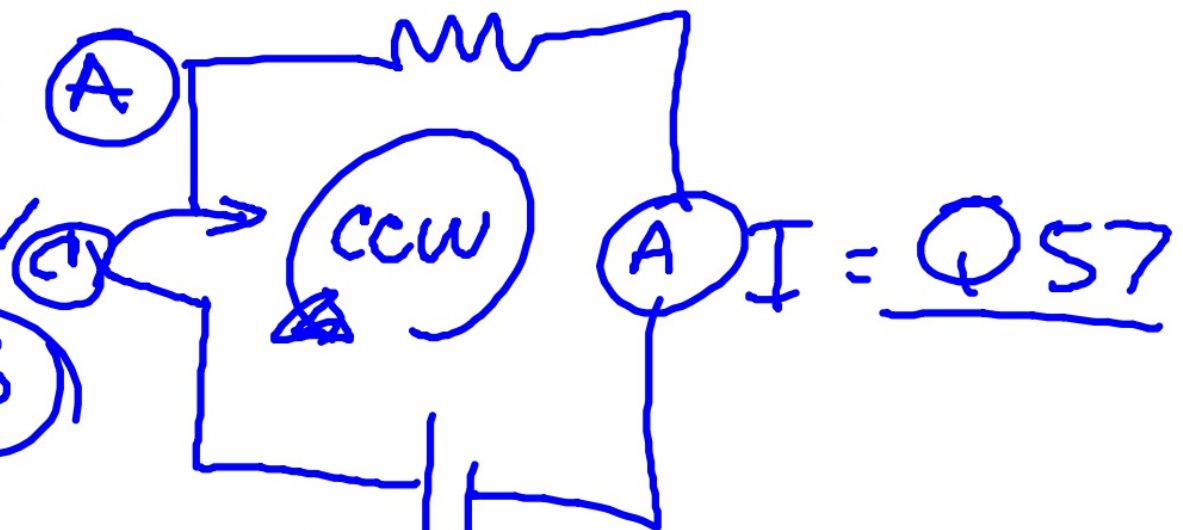
(D)

$$R = 4.5 \Omega$$

57. I 4A (A)

58. P 72W (C)

59. DIR (B)



$$V = IR$$

$$I = V/R = 18V / 4.5 = 4A$$

$$P = IV = (4A)(18V) = 72W$$

$$V = 18V$$